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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/599,809	06/21/2000	Matthew J. Kotler	MSI-561US	8042

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LEE & HAYES PLLC  
421 W RIVERSIDE AVENUE SUITE 500  
SPOKANE, WA 99201

EXAMINER

NGUYEN BA, PAUL H

ART UNIT PAPER NUMBER

2176

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/599,809	KOTLER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paul Nguyen-Ba	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13,41-50,82-92,98-101 and 103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13,41-50,82-92,98-101 and 103 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. <u>10/7/05</u> .                                     |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/11/03, 9/2/05, 11/14/05</u> .  | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/2005 has been entered.
2. Claims 1-13, 41-50, 82-92, 98-101, and 103 are currently pending.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-13, 41-43, 82-92, 98, and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laura Acklen & Read Gilgen ("Acklen"), *Using Corel WordPerfect 9*, 251-284, 424-434, 583-586 (1998).

#### **Independent Claim 1 and Claim 4**

Acklen teaches *an architecture comprising:*

*a table appearance manager to manage how a table appears in a document comprising a table component to support editing functionality of the table (see generally pgs. 252-284 – “Organizing Information with Tables in WordPerfect” → teaches a table manager to create, work, edit, format the way a table appears in a document); and a spreadsheet functionality manager to manage spreadsheet functions for the table and to receive data and formulas input into the table (see pgs. 425-430 - “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables” → manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.);*

...

Acklen does not explicitly teach:

*wherein the table appearance manager and the spreadsheet functionality manager are architecturally separate system managers of the architecture.*

However, it was commonly known to those of ordinary skill in the art and would have been obvious at the time the invention was made to a person having ordinary skill in the art that the OLE (Object Linking and Embedding) standard and the OpenDoc Application Programming Interface (API) are both well known compound document standards/interfaces wherein the independent programs (components → i.e. spreadsheet manager and word processor table manager) are architecturally separate despite the ability of the separate architectures to work together on a single document for the motivational purpose of integrating independent programs onto a single compound document.

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen with the teachings of OLE or

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OpenDoc to include separate architectures for the table appearance manager and the spreadsheet functionality manager.

**Claim 2**

Acklen teaches the architecture of claim 1, *wherein the document is a markup document* (see pgs. 583-586 → An entire document, including tables, can be converted to HTML documents).

**Claim 3**

Acklen further teaches the architecture of claim 1, *wherein the table appearance manager provides a formula edit box to permit the user to enter a formula into a cell of the table* (see pgs. 425-427 and Fig. 15.22 → the Formula Textbox).

**Claim 5**

Acklen further teaches *the architecture of claim 1, wherein the spreadsheet functionality manager comprises:*

*a cell table to maintain data values and formulas used in the table* (see pgs. 425-427 and Figs. 15.21, 15.22 → table maintains data values and formulas); *and*

*a format table to maintain formatting information used in the table* (see pgs. 264-284 → formatting information can be saved when editing the format of the table).

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### **Claim 6**

Acklen further teaches *the architecture of claim 1, wherein the spreadsheet functionality manager comprises:*

*a cell table to maintain data values and formulas used in the table (see pgs. 425-427 and Figs. 15.21, 15.22 → table maintains data values and formulas); and*

*a recalculation engine to recalculate the formulas following a change to a data value or formula in the cell table (see pg. 427 → Tables can be set to automatically recalculate when you make changes).*

### **Claim 7**

Acklen further teaches *the architecture of claim 1, wherein the spreadsheet functionality manager comprises:*

*a cell table to maintain data values and formulas used in the table (see pgs. 425-427 and Figs. 15.21, 15.22 → table maintains data values and formulas);*

*a delay parser to parse input for the cell table as needed (see pg. 427 – “View Error” → If you incorrectly build a formula, this command will allow you to find out why you got the error and how to fix the problem. It is therefore inherent that the input is parsed in order to determine whether a formula is entered correctly for calculation or in need of correction due to error); and*

*a recalculation engine to recalculate the formulas following a change to a data value or formula in the cell (see pg. 427 → tables can be set to automatically recalculate when you make changes).*

**Claims 8-10**

Acklen further teaches *the architecture of claim 1, wherein multiple tables appear in one or more documents, and the spreadsheet functionality manager is configured to maintain data and formulas for the multiple tables and track references made from one table to another table, the spreadsheet functionality being further configured to update any data and formulas in the multiple tables that is affected by a change made to one of the tables* (see pgs. 431-434 – “Project”; see also Fig. 15.30 → WordPerfect’s built-in spreadsheet capabilities allows the ability to link (*track references*) between a database table and a document table with formulas. Therefore, changes to one of the tables will automatically update any data and formulas affected by the change).

**Claim 11**

Acklen further teaches *the architecture of claim 1, wherein multiple tables appear in one or more documents, and wherein:*

*the table appearance manager comprises multiple spreadsheet components so that there is one spreadsheet component for an associated table, each spreadsheet component being configured to capture data and formulas input into the associated table; and*

*the spreadsheet functionality manager comprises multiple grid components so that there is one grid component for an associated table and an associated spreadsheet component, each grid component maintaining the data, the formulas, and formatting used in the associated table* (see generally pgs. 252-284 – “Organizing Information with Tables in WordPerfect” → teaches a table manager to create, work, edit, format the way a table appears in a document).

### **Claim 12**

Acklen further teaches *the architecture of claim 1, further comprising a document renderer to render the document* (see pgs. 277-284 → WordPerfect allows the adding of realism to computer graphics by adding 3D qualities such as shadows and variations in color and shade).

### **Claim 13**

Acklen teaches the architecture of claim 1 as discussed above, but does not specifically teach *wherein the table appearance manager and the spreadsheet functionality manager reside on different computers*. It was commonly known to those of ordinary skill in the art that table managers and spreadsheet managers may reside on different computers for the purpose of saving hard drive space on a particular computer. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to separate a table manager and a spreadsheet manager for the purpose of saving hard drive space on a particular computer.

### **Independent Claims 41, 82, and 98, and Claims 42, 83, 84**

Acklen teaches the architecture with respect to independent claim 1 as discussed above.

Furthermore, Acklen teaches *an architecture comprising:*

first and second tables renderable for display as part of a common document (see pg. 254 → The Drag to Create a New Table option in the Create Table dialog box enables you to create a second table inside of a first table (*nested*). After the second table is created, you can work with it just the same as the first table);



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*a first spreadsheet component to receive at least one of data or a first formula entered into a first cell in the first table; a first grid component to hold the data or first formula in association with the first cell of the first table (see Fig. 15.21 → notice grid component and cells which can hold data and formulas; see also pgs. 425-430 - “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables” → manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.);*

*a second spreadsheet component to receive at least a second formula entered into a second cell in the second table, the second formula referencing the first cell in the first table; and a second grid component to hold the second formula in association with the second cell of the second table (see Fig. 15.21 → notice grid component and cells which can hold data and formulas; see also pgs. 425-430 - “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables” → manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).*

### **Claims 43**

Acklen teaches *the architecture of claim 41, wherein the second spreadsheet component presents a formula edit box to allow user entry of the second formula (see pgs. 425-427 and Fig. 15.22 → the Formula Textbox).*

### **Claims 85-91 and Independent Claim 92**

Acklen teaches the method integrating text and a spreadsheet table within a common document as discussed in independent claim 82 above.

It was commonly known to those of ordinary skill in the art and would have been obvious at the time the invention was made to a person having ordinary skill in the art to that the elements claimed in claims 85-92 are well-known features in word processing documents such as WordPerfect for the purpose of document processing.

### **Claim 103**

Please refer to the rationale relied upon to reject claim 102.

5. Claims 44-50, 99-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laura Acklen & Read Gilgen ("Acklen"), *Using Corel WordPerfect 9*, 251-284, 424-434, 583-586 (1998), in view of Redpath, U.S. Patent No. 5,630,126.

**Claims 44-49, 99, 100**

Acklen teaches the architecture of claim 41 and 42 as discussed above, but does not specifically teach the architecture wherein the second spreadsheet component facilitates reference editing to the first cell in the first table comprising a recalculation engine wherein the first and second tables are updated to reflect a result produced by the recalculation engine.

However, Redpath teaches a plurality of math cells located within a common compound document, all linked together (i.e. *dependencies*) so that related math parts are evaluated and updated upon user input. In response to user input, each math cell in the first set automatically displays the results from the reevaluation (i.e. *recalculation*) of its computational functions (i.e. *formulas*) (see col. 2, lines 38-40, 61-63; col. 3, lines 60 *et seq.*).

Since Acklen and Redpath are both from the same field of endeavor, the purposes disclosed by Redpath would have been recognized in the pertinent art of Acklen. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen with the teachings of Redpath to include reference editing between tables in a common compound document for the purpose of linking calculations

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between cells and thus, automatically recalculating and updating functions upon user input for both tables.

**Claim 50, 101**

Acklen further teaches *the architecture of claim 41, further comprising:*

*a free floating field renderable in the document but separately from the first and second tables; a third spreadsheet component to receive a third formula entered into the free floating field (see pgs. 429-430); and*

*a third grid component to hold the third formula table (see Fig. 15.21 → notice grid component and cells which can hold data and formulas; see also pgs. 425-430 - “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables” → manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).*

***Response to Arguments***

6. Applicant's arguments filed 10/17/2005 have been fully considered but they are not persuasive. Applicant's arguments were substantially directed to the amended claims. Please refer to the new grounds of rejection as discussed above.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Nguyen-Ba whose telephone number is (571) 272-4094.

The examiner can normally be reached on 11 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PNB

*William L. Bashore*  
**WILLIAM BASHORE**  
**PRIMARY EXAMINER**  
11/27/2005